#### **CLAIMS**

#### I claim:

- A collection content classifier process for producing classification information for collections, to be performed on or with the aid of a programmable device, comprising the following steps:
  - (a) determining collection membership information for a collection being processed, and
  - (b) making said collection membership information available for use by software programs,

thereby providing a solution to the collection content membership problem, and thereby enabling application programs to determine collection membership information in an automated, scalable way that was not previously available.

- 2. The process of claim 1, wherein
  - (a) said step of determining collection membership information uses collection multiple product specification information,

thereby providing a solution to the collection multiple product problem, and thereby enabling application programs to determine collection membership information for multiple collection products in an automated, scalable way that was not previously available.

### 3. The process of claim 1, wherein

(a) said step of determining collection membership information uses collection special fileset specification information,

thereby providing a solution to the collection special fileset problem, and

thereby enabling application programs to determine collection membership information for collection special filesets in an automated, scalable way that was not previously available.

### 4. The process of claim 1, wherein

(a) said step of determining collection membership information uses one or more collection content control directives,

thereby providing an enhanced solution for the collection content membership problem that accommodates external collection content and provides precise mechanisms for overriding collection specifier and type definition information, and

thereby enabling application programs to determine collection membership information that involves external collection content, in an automated, scalable way that was not previously available.

### 5. The process of claim 1, wherein

(a) said step of determining collection membership information uses information selected from the group consisting of collection type definition information and collection product type definition information and collection content type definition information,

thereby providing human administrators with a means for conveniently implementing and customizing administrative classification policies that are used by collection content classifiers.

## 6. The process of claim 1, further comprising

- (a) assigning content types to collection content files listed in said collection membership information, and
- (b) making said assigned content types available for use by software programs,

thereby providing a solution to the collection content type assignment problem, and

thereby enabling application programs to determine the content types of collection content members in an automated, scalable way that was not previously available.

# 7. The process of claim 6, further comprising

(a) assigning symbolic processing actions to collection content file members listed in said collection membership information, and

- (b) assigning symbolic processing actions to collection product members listed in said collection membership information, and
- (c) assigning symbolic processing actions to collection members listed in said collection membership information, and
- (d) making all said assigned symbolic processing actions available for use by software programs,

thereby providing a solution to the collection action assignment problem, and thereby enabling application programs to determine appropriate collection processing actions in an automated, scalable way that was not previously available.

8. The process of claim 7, further comprising

previously available.

- (a) calculating dependency information for collection content file members listed in said collection membership information, and
- (b) making said calculated dependency information available for use by software programs,

thereby providing a solution to the collection content dependency problem, and thereby enabling application programs to determine processing dependencies among collection content members in an automated, scalable way that was not

- 9. A programmable collection content classifier device for producing classification information for collections, whose actions are directed by software executing a process comprising the following steps:
  - (a) determining collection membership information for a collection being processed, and
  - (b) making said collection membership information available for use by software programs,

thereby providing a solution to the collection content membership problem, and thereby enabling application programs to determine collection membership information in an automated, scalable way that was not previously available.

- 10. The programmable device of claim 9, wherein
  - (a) said step of determining collection membership information uses collection multiple product specification information,

thereby providing a solution to the collection multiple product problem, and thereby enabling application programs to determine collection membership information for multiple collection products in an automated, scalable way that was not previously available.

### 11. The programmable device of claim 9, wherein

(a) said step of determining collection membership information uses collection special fileset specification information,

thereby providing a solution to the collection special fileset problem, and

thereby enabling application programs to determine collection membership information for collection special filesets in an automated, scalable way that was not previously available.

### 12. The programmable device of claim 9, wherein

(a) said step of determining collection membership information uses one or more collection content control directives,

thereby providing an enhanced solution for the collection content membership problem that accommodates external collection content and provides precise mechanisms for overriding collection specifier and type definition information, and

thereby enabling application programs to determine collection membership information that involves external collection content, in an automated, scalable way that was not previously available.

### 13. The programmable device of claim 9, wherein

(a) said step of determining collection membership information uses information selected from the group consisting of collection type definition information and collection product type definition information and collection content type definition information,

thereby providing human administrators with a means for conveniently implementing and customizing administrative classification policies that are used by collection content classifiers.

- 14. The programmable device of claim 9, further comprising the process steps of
  - (a) assigning content types to collection content files listed in said collection membership information, and
  - (b) making said assigned content types available for use by software programs,

thereby providing a solution to the collection content type assignment problem, and

thereby enabling application programs to determine the content types of collection content members in an automated, scalable way that was not previously available.

- 15. The programmable device of claim 14, further comprising the process steps of
  - (a) assigning symbolic processing actions to collection content file members listed in said collection membership information, and

- (b) assigning symbolic processing actions to collection product members listed in said collection membership information, and
- (c) assigning symbolic processing actions to collection members listed in said collection membership information, and
- (d) making all said assigned symbolic processing actions available for use by software programs,

thereby providing a solution to the collection action assignment problem, and thereby enabling application programs to determine appropriate collection processing actions in an automated, scalable way that was not previously available.

- 16. The programmable device of claim 15, further comprising
  - (a) calculating dependency information for collection content file members listed in said collection membership information, and
  - (b) making said calculated dependency information available for use by software programs,

thereby providing a solution to the collection content dependency problem, and thereby enabling application programs to determine processing dependencies among collection content members in an automated, scalable way that was not previously available.

- 17. A computer readable memory, encoded with data representing a collection content classifier computer program that can be used to direct a computer when used by the computer, comprising:
  - (a) means for determining collection membership information for a collection being processed, and
  - (b) means for making said collection membership information available for use by software programs,

thereby providing a solution to the collection content membership problem, and

thereby enabling application programs to determine collection membership information in an automated, scalable way that was not previously available.

- 18. The computer readable memory of claim 17, wherein
  - (a) said means for determining collection membership information uses collection multiple product specification information,

thereby providing a solution to the collection multiple product problem, and

thereby enabling application programs to determine collection membership information for multiple collection products in an automated, scalable way that was not previously available.

### 19. The computer readable memory of claim 17, wherein

(a) said means for determining collection membership information uses collection special fileset specification information,

thereby providing a solution to the collection special fileset problem, and

thereby enabling application programs to determine collection membership information for collection special filesets in an automated, scalable way that was not previously available.

### 20. The computer readable memory of claim 17, wherein

(a) said means for determining collection membership information uses one or more collection content control directives,

thereby providing an enhanced solution for the collection content membership problem that accommodates external collection content and provides precise mechanisms for overriding collection specifier and type definition information, and

thereby enabling application programs to determine collection membership information that involves external collection content, in an automated, scalable way that was not previously available.

### 21. The computer readable memory of claim 17, wherein

(a) said means for determining collection membership information uses information selected from the group consisting of collection type definition information and collection product type definition information and collection content type definition information,

thereby providing human administrators with a means for conveniently implementing and customizing administrative classification policies that are used by collection content classifiers.

# 22. The computer readable memory of claim 17, further comprising

- (a) means for assigning content types to collection content files listed in said collection membership information, and
- (b) means for making said assigned content types available for use by software programs,

thereby providing a solution to the collection content type assignment problem, and

thereby enabling application programs to determine the content types of collection content members in an automated, scalable way that was not previously available.

- 23. The computer readable memory of claim 22, further comprising
  - (a) means for assigning symbolic processing actions to collection content file

members listed in said collection membership information, and

- (b) means for assigning symbolic processing actions to collection product members listed in said collection membership information, and
- (c) means for assigning symbolic processing actions to collection members listed in said collection membership information, and
- (d) means for making all said assigned symbolic processing actions available for use by software programs,

thereby providing a solution to the collection action assignment problem, and

thereby enabling application programs to determine appropriate collection processing actions in an automated, scalable way that was not previously available.

- 24. The computer readable memory of claim 23, further comprising
  - (a) means for calculating dependency information for collection content file members listed in said collection membership information, and
  - (b) means for making said calculated dependency information available for use by software programs,

thereby providing a solution to the collection content dependency problem, and

thereby enabling application programs to determine processing dependencies among collection content members in an automated, scalable way that was not previously available.